

ABSTRACT OF THE DISCLOSURE:

In a local area network path control system, hubs are connected in a ring and classified into two groups. Each of terminals has two LAN controllers. One of LAN controllers is connected to one of the hubs belonging to one of the groups while the other is connected one of the hubs belonging to the other group. One of the LAN controller is used as an active controller and the other is used as a standby controller. Each of the terminals has a destination information table registering destination IP addresses and destination MAC addresses of the other terminals. When the terminal detects failure occurring between the active controller and the corresponding hub, it changes the active controller from one to the other of the two LAN controllers. Furthermore, the terminal notifies a newly MAC address for communicating with the terminal to the other terminals. Each of the other terminals rewrites the destination MAC address related to the terminal which notifies the newly MAC address of the destination information terminal.